

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 27 and 29 have been amended as follows:

Listing of Claims:

Claim 1 (original): An antibody having an activity of recognizing GM1 ganglioside-bound amyloid β -protein and inhibiting the formation of amyloid fibrils, the antibody comprising a heavy chain variable region, wherein the heavy chain variable region comprises at least one region of the regions described in a), b) and c):

- a) a first region consisting of an amino acid sequence of SEQ ID NO: 1, or the amino acid resulted from a partial alteration of SEQ ID NO: 1;
- b) a second region consisting of an amino acid sequence of SEQ ID NO: 2 or the amino acid sequence resulted from a partial alteration of SEQ ID NO: 2; and
- c) a third region consisting of an amino acid sequence of SEQ ID NO: 3 or the amino acid sequence resulted from a partial alteration of SEQ ID NO: 3.

Claim 2 (original): An antibody having an activity of recognizing GM1 ganglioside-bound amyloid β -protein and inhibiting the formation of amyloid fibrils, the antibody comprising a light chain variable region, wherein the light chain variable region comprises at least one region of the regions described in d), e) and f):

- d) a fourth region consisting of an amino acid sequence of SEQ ID NO: 4, or the amino acid sequence resulted from a partial alteration of SEQ ID NO: 4;
- e) a fifth region consisting of an amino acid sequence of SEQ ID NO: 5, or the amino acid sequence resulted from a partial alteration of SEQ ID NO: 5; and
- f) a sixth region consisting of an amino acid sequence of SEQ ID NO: 6, or the amino acid sequence resulted from a partial alteration of SEQ ID NO: 6.

Claim 3 (original): An antibody having an activity of recognizing GM1 ganglioside-bound amyloid β -protein and inhibiting the formation of amyloid fibrils, the antibody comprising: a heavy chain variable region; and a light chain variable region, wherein the heavy chain variable region comprises complementarity determining regions (CDRs) described in g), h) and i), and the light chain variable region comprises CDRs described in j), k) and l);

- g) CDR 1 consisting of an amino acid sequence of SEQ ID NO. 1, or the amino acid sequence resulted from a partial alteration of SEQ ID NO: 1;
- h) CDR 2 consisting of an amino acid sequence of SEQ ID NO. 2, or the amino acid sequence resulted from a partial alteration of SEQ ID NO: 2;
- i) CDR 3 consisting of an amino acid sequence of SEQ ID NO. 3, or the amino acid sequence resulted from a partial alteration of SEQ ID NO: 3;
- j) CDR 1 consisting of an amino acid sequence of SEQ ID NO. 4, or the amino acid sequence resulted from a partial alteration of SEQ ID NO: 4;
- k) CDR 2 consisting of an amino acid sequence of SEQ ID NO. 5, or the amino acid sequence

resulted from a partial alteration of SEQ ID NO: 5; and

l) CDR 3 consisting of an amino acid sequence of SEQ ID NO. 6, or the amino acid sequence resulted from a partial alteration of SEQ ID NO: 6.

Claim 4 (original): An antibody having an activity of recognizing GM1 ganglioside-bound amyloid β -protein and inhibiting the formation of amyloid fibrils, the antibody comprising a heavy chain variable region, wherein the heavy chain variable region comprises an amino acid sequence of SEQ ID NO: 7, or the amino acid sequence resulted from a partial alteration of SEQ ID NO: 7.

Claim 5 (original): An antibody having an activity of recognizing GM1 ganglioside-bound amyloid β -protein and inhibiting the formation of amyloid fibrils, the antibody comprising a light chain variable region, wherein the light chain variable region comprises an amino acid sequence of SEQ ID NO: 8, or the amino acid sequence resulted from a partial alteration of SEQ ID NO: 8.

Claim 6 (original): An antibody having an activity of recognizing GM1 ganglioside-bound amyloid β -protein and inhibiting the formation of amyloid fibrils, the antibody comprising: a heavy chain variable region; and a light chain variable region, wherein the heavy chain variable region comprises an amino acid sequence of SEQ ID NO: 7, or the amino acid sequence resulted from a partial alteration of SEQ ID NO: 7; and the light chain variable region comprises an amino acid sequence of SEQ ID NO: 8, or the amino acid sequence resulted from a partial alteration of SEQ ID NO: 8.

Claim 7 (original): The antibody according to claim 1, which is a humanized antibody.

Claim 8 (original): The antibody according to claim 2, which is a humanized antibody.

Claim 9 (original): The antibody according to claim 1, which is an antibody Fab, Fab', F(ab')
, scFv, or dsFv.

Claim 10 (original): The antibody according to claim 2, which is an antibody Fab, Fab',
F(ab') , scFv, or dsFv.

Claim 11 (original): A DNA encoding the antibody described in claim 1.

Claim 12 (original): A DNA encoding the antibody described in claim 2.

Claim 13 (original): A DNA encoding the heavy chain variable region of the antibody
described in claim 1.

Claim 14 (original): The DNA according to claim 13, consisting of a base sequence of SEQ
ID No. 9.

Claim 15 (original): A DNA comprising the DNA described in claim 13, which encodes an antibody heavy chain.

Claim 16 (original): A DNA encoding a light chain variable region of the antibody described in claim 2.

Claim 17 (original): The DNA according to claim 16, consisting of a base sequence of SEQ ID NO. 10.

Claim 18 (original): A DNA comprising the DNA described in claim 16, which encodes an antibody light chain.

Claim 19 (original): A DNA encoding an amino acid sequence of SEQ ID NO. 1.

Claim 20 (original): A DNA encoding an amino acid sequence of SEQ ID NO. 2.

Claim 21 (original): A DNA encoding an amino acid sequence of SEQ ID NO. 3.

Claim 22 (original): A DNA encoding an amino acid sequence of SEQ ID NO. 4.

Claim 23 (original): A DNA encoding an amino acid sequence of SEQ ID NO. 5.

Claim 24 (original): A DNA encoding an amino acid sequence of SEQ ID NO. 6.

Claim 25 (original): A vector holding the DNA described in claim 11 in a manner capable of its expression.

Claim 26 (original): A vector holding the DNA described in claim 12 in a manner capable of its expression.

Claim 27 (currently amended): A vector holding the DNA described in claim 13 and a DNA encoding a light chain variable region of an antibody having an activity of recognizing GM1 ganglioside-bound amyloid β-protein and inhibiting the formation of amyloid fibrils, the antibody comprising a light chain variable region, wherein the light chain variable region comprises at least one region of the regions described in d), e) and f):

d) a fourth region consisting of an amino acid sequence of SEQ ID NO: 4, or the amino acid sequence resulted from a partial alteration of SEQ ID NO: 4;

e) a fifth region consisting of an amino acid sequence of SEQ ID NO: 5, or the amino acid sequence resulted from a partial alteration of SEQ ID NO: 5; and

f) a sixth region consisting of an amino acid sequence of SEQ ID NO: 6, or the amino acid sequence resulted from a partial alteration of SEQ ID NO: 6 ~~DNA described in claim 16~~
in a manner capable of its expression.

Claim 28 (original): A transformant which is transformed with the vector described in claim 25.

Claim 29 (currently amended): A transformant which is cotransformed with a vector holding the DNA described in claim 13 in a manner capable of its expression and a vector holding a DNA encoding a light chain variable region of an antibody having an activity of recognizing GM1 ganglioside-bound amyloid β-protein and inhibiting the formation of amyloid fibrils, the antibody comprising a light chain variable region, wherein the light chain variable region comprises at least one region of the regions described in d), e) and f):

d) a fourth region consisting of an amino acid sequence of SEQ ID NO: 4, or the amino acid sequence resulted from a partial alteration of SEQ ID NO: 4;

e) a fifth region consisting of an amino acid sequence of SEQ ID NO: 5, or the amino acid sequence resulted from a partial alteration of SEQ ID NO: 5; and

f) a sixth region consisting of an amino acid sequence of SEQ ID NO: 6, or the amino acid sequence resulted from a partial alteration of SEQ ID NO: 6 the DNA described in claim 16 in a manner capable of its expression.

Claim 30 (original): A method for producing an antibody, the method comprising: cultivating the transformant described in claim 28; and collecting an expressed antibody.

Claim 31 (original): A method for producing an antibody, the method comprising:
cultivating the transformant described in claim 29; and collecting an expressed antibody.